FOREST INSECT CONDITIONS
ON THE SAWTOOTH N.F. - 1971

The following report is a record of forest insect activity on the Sawtooth National Forest in 1971. Information was compiled from aerial detection surveys, on-the-ground biological evaluations, and detection reports submitted by the Forest staff.

Douglas fir beetle continued to accelerate tree killing along the South Fork of the Boise River. Large diameter lodgepole pine continued to sustain the mountain pine beetle infestation Forest-wide at about the same level as recorded last year. No spruce budworm activity was noted for the second consecutive year in the Big Smoky Area. Nominal mortality of over-mature ponderosa pine attacked by the Western pine beetle, was detected northeast of Featherville. Weeviling of terminals and dominant laterals of lodgepole pine saplings in Sawtooth Valley showed some reduction in the incidence of attack this year; however, cumulative data collected over the last four years in three study areas showed significant damage.

DOUGLAS FIR BEETLE - Dendroctonus pseudotsugae Hopk.

Aerially observed tree killing as indicated by group fading continued to maintain the same high level as of the last two years. Mortality was recorded on Ranger Districts along the South Fork of the Boise River. Increased activity was also noted in Deer Creek and its tributaries northwest of Hailey. Elsewhere on the North Division, evidence of this destructive beetle's presence was characterized by widely scattered 3 to 20 tree groups of red topped trees. Numbers of groups have declined slightly and it appears that the infestations are leveling off or possibly declining.

Prolonged infestations have been recorded for periods up to seven years, at which time they collapse due to natural causes. Salvage logging is presently the only prescription for reducing to some extent, future losses, and then only on a localized and temporary basis. Care should be taken in all sale areas to reduce, as much as possible, the availability of large slash which is favorable buildup habitat for this insect. Current year disposal of long butts and large diameter cull pieces is a must to prevent localized buildups.

MOUNTAIN PINE BEETLE - Dendroctonus ponderosa Hopk.

Availability of live large diameter lodgepole pine Forest-wide has sustained an infestation which parallels in duration that of the Targhee Forest in eastern Idaho. High losses of trees were again recorded in the South Fork of the Boise River, above its confluence with Big Smoky Creek. Also, Little Smoky Creek (Fairfield R.D.), Warm Springs Creek and the Big Wood River and its North Fork (Ketchum R.D.), and the Twin Falls R.D., as a whole are heavily infested.

Variable plot cruising will be initiated in 1972 in an effort to assess losses and to determine remaining green stand composition by diameter classes. This cruise information should also enable us to predict loss trends by area and possibly afford land managers with information that could help in formulating future management programs.

LODGEPOLE TERMINAL WEEVIL - Pissodes terminalis Hopk.

The yearly surveillance of this insect initiated in 1967 to evaluate long range effects on the growth and form of lodgepole pine saplings continued. Three plots composed of 100 trees each, located north of Alturas Lake make up the study area. The weevil usually attacks the terminal leader or dominant lateral of the highest whorl. In June, the terminal becomes infested and dies from larval pith feeding, causing lateral leaders to strive for dominance the following growth season. As one of the laterals becomes the terminal, a "crook" is formed at the whorl and that year's vertical growth is substantially reduced.

Incidence of Attacks by Lodgepole Pine Terminal Weevil in Saplings for a Three-Year Observational Period, Sawtooth N.F., Idaho

	Plot 1			Plot 2			Plot 3		
No. of Trees	68	69	71	68	69	71	68	69	71
Weeviled preceding year	78	2	2/	63	3	2/	66	30	2/
Currently weeviled	2	35	62	3	38	60	30	46	39
Non-weeviled this year	20	48	30	34	41	31	4	23	61
Never weeviled during study.	1/	15	8	1/	18	9	1/	1	0

1/ Not applicable at commencement of study.
2/ No 1970 data available for comparison.

An attempt will be made in 1972 to compare the reduction in total height of weeviled to non-weeviled saplings. It is very difficult to predict the end result of weevil damage to trees when they reach the 30' to 50' height; however, observations in nearby surrounding stands indicate considerable stag tops and crotch or double tops.